Comments on the BRAC Assessment of the Economic Impact of the Closure of the Portsmouth Naval Shipyard

Prepared by

Economic and Labor Market Information Bureau New Hampshire Employment Security

Peter S. Bartlett, Economist Annette Nielsen, Labor Market Analyst

May 31, 2005

Comments on the DOD Assessment of the Economic Impact of the BRAC Recommended Closure of the Portsmouth Naval Shipyard

On Friday the thirteenth of May 2005, the Defense Department released its list of recommended military base closures for the 2005 round of the Base Closure and Realignment Act. The Portsmouth Naval Shipyard, in Kittery, Maine was included on that list. The recommendation for each closure or realignment included a paragraph entitled "Economic Impact on Communities". As we represent an agency that is familiar with the local economies of New England and that has recognized expertise in the local economies of New Hampshire, we offer these comments on the BRAC economic impact statement regarding the recommendation for closure of the Portsmouth Naval Shipyard.

We respectfully disagree with the Department of Defense estimate of economic impact, and suggest an alternative calculation that is more meaningful for the area.

❖ The BRAC report finds the PNS closing impact to be 2.8% of area employment, but this is misleading. The DOD methodology, based on BEA employment estimates and OMB-defined, county-based, metropolitan and micropolitan areas, is inadequate for analyzing and comparing the economic impacts to communities.

The DOD rationale does not discuss how well the methodology represents the economies in vastly different regions. The DOD "methodology" used BEA employment estimates for OMB-defined county-based metropolitan and micropolitan areas. This methodology automatically produced flat numbers, with no analytical value judgement offered by any human analyst. The total impact of the closing of the Portsmouth Naval Shipyard, according to this methodology, is 2.8 percent of the area BEA employment. What does this mean?

Any analyst would question the meaning of the difference among the 0.8 percent impact for the closure of Fort Monmouth, N.J.; the 9.4 percent impact for the closure of the Submarine Base, New London, Conn.; and the 20.5 percent impact for the closure of the Cannon Air Force Base, N.M.

In fact, the difference between these three numbers has more to do with the inadequacy of using the BEA estimates and OMB county-based metropolitan and micropolitan statistical areas as a basis for local impact analysis than any

This paragraph is word for word, save for changed numbers, the same for every single base closing and realignment recommendation in the BRAC report. It is apparent, that although economic impact to communities is a secondary criteria to be considered in the BRAC process, the DOD has given it short shrift. The economic impact statement was produced by a computer that generated numbers and plugged them into a template. No analysis of the meaning of this data has been published by DOD or the branches. It appears that DOD gave no consideration to the economic impact of their recommendations in spite of the BRAC mandate to do so.

Bases with Largest Direct Job Losses. Region Size is Governing Factor in Area Employment %.

BRAC 2005 Closure and Realignment Impacts sorted by total direct employment losses

_ - _					
			Total Joh	Economic	Percent of Area
Action					Emp.
				_	
Realign	-5,630	-3,856	-9,486	2,771,791	-0.3%
Close	-5,272	-4,465	-9,737	1,220,335	-0.8%
Close	-4,510	-4,656	-9,166	331,655	-2.8%
Realign	-4,145	2,657	6,802	195,370	3.5%
Close	-4,141	-2,705	-6,846	2,777,548	-0.2%
Close	-3,852	-2,915	-6,767	79,970	-8.5%
Close	-3,564	-4,418	-7,982	978,888	-0.8%
Realign	-3,140	-2,755	-5,895	1,009,217	-0.6%
Realign	-2,944	8	-2,936	65,926	-4.5%
Realign	-2,940	-1,770	-4,710	54,469	-8.6%
Close	-2,923	-2,801	-5,724	1,009,217	-0.6%
Close	-2,824	-1,955	-4,779	23,348	-20.5%
Close	-2,711	-2,016	-4,727	763,801	-0.6%
Realign	-2,645	-2,284	-4,929	66,242	-7.4%
Realign	-2,624	-1,744	-4,368	93,033	-4.7%
Close	-2,500	-1,676	-4,176	67,895	-6.2%
Realign	-2,420	-1,846	-4,266	331,655	-1.3%
Close	-2,218	-2,582	-4,800	221,376	-2.2%
Realign	-2,152	-2,066	-4,218	978,888	-0.4%
	Close Realign Close Realign Close Close Close Realign Realign Close Close Realign Close Close Realign Close Close Realign Close Realign Realign Close	Action Direct Changes Close -8,460 Realign -5,630 Close -5,272 Close -4,510 Realign -4,145 Close -4,141 Close -3,852 Close -3,564 Realign -2,944 Realign -2,944 Realign -2,940 Close -2,923 Close -2,711 Realign -2,645 Realign -2,624 Close -2,500 Realign -2,420 Close -2,218	Action Changes Changes Close -8,460 -7,353 Realign -5,630 -3,856 Close -5,272 -4,465 Close -4,510 -4,656 Realign -4,145 2,657 Close -4,141 -2,705 Close -3,852 -2,915 Close -3,564 -4,418 Realign -3,140 -2,755 Realign -2,944 8 Realign -2,940 -1,770 Close -2,923 -2,801 Close -2,923 -2,801 Close -2,824 -1,955 Close -2,711 -2,016 Realign -2,645 -2,284 Realign -2,624 -1,744 Close -2,500 -1,676 Realign -2,420 -1,846 Close -2,218 -2,582	Action Direct Changes Indirect Changes Total Job Changes Close -8,460 -7,353 -15,813 Realign -5,630 -3,856 -9,486 Close -5,272 -4,465 -9,737 Close -4,510 -4,656 -9,166 Realign -4,145 2,657 6,802 Close -4,141 -2,705 -6,846 Close -3,852 -2,915 -6,767 Close -3,564 -4,418 -7,982 Realign -3,140 -2,755 -5,895 Realign -2,944 8 -2,936 Realign -2,940 -1,770 -4,710 Close -2,923 -2,801 -5,724 Close -2,923 -2,801 -5,724 Close -2,824 -1,955 -4,779 Close -2,711 -2,016 -4,727 Realign -2,645 -2,284 -4,929 Realign -2,624	ActionDirect ChangesIndirect ChangesTotal Job ChangesEconomic ChangesClose-8,460-7,353-15,813168,620Realign-5,630-3,856-9,4862,771,791Close-5,272-4,465-9,7371,220,335Close-4,510-4,656-9,166331,655Realign-4,1452,6576,802195,370Close-4,141-2,705-6,8462,777,548Close-3,852-2,915-6,76779,970Close-3,564-4,418-7,982978,888Realign-3,140-2,755-5,8951,009,217Realign-2,9448-2,93665,926Realign-2,940-1,770-4,71054,469Close-2,923-2,801-5,7241,009,217Close-2,824-1,955-4,77923,348Close-2,711-2,016-4,727763,801Realign-2,645-2,284-4,92966,242Realign-2,624-1,744-4,36893,033Close-2,500-1,676-4,17667,895Realign-2,420-1,846-4,266331,655Close-2,218-2,582-4,800221,376

^{*} DOD used county-based BEA 2002 employment estimates for Metropolitan and Micropolitan Statistical Areas (or single counties where no M/MSAs exist) where bases are located.

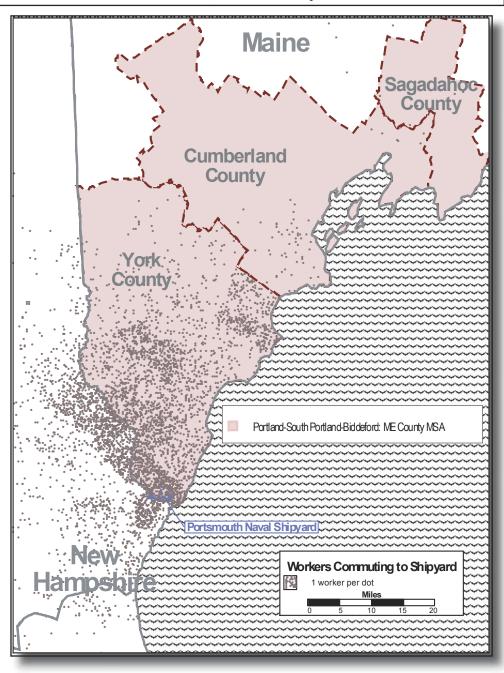
difference between the economic effects of the closures on each of these base's local communities.

It does not take an economist to see that it is superficial to compare the effects of closure of Fort Monmouth as a percent of the Edison, NJ (County) Metropolitan Division (2002 BRAC Economic Area Employment, 1,220,335) with the effects of closure of the New London Submarine Base as a percent of the Norwich-New London, CT (County) Metropolitan Statistical Area (2002 BRAC Economic Area Employment, 168,620), with the effects of closure of Cannon Air Force Base, N.M as a percent of the Clovis, NM Micropolitan Statistical Area (2002 BRAC Economic Area Employment, 23,348).

❖ The Department of Defense used OMB county-based metropolitan/micropolitan areas to measure the economic impact of base closures. These areas do not adequately describe New England economic regions and therefore underestimate the true economic impact on affected communities.

The use of OMB county-based Metropolitan/Micropolitan areas is very imprecise in New England. In this region we have long argued for the use of city/town-based areas. Our counties have little economic significance. New England regional economies are best represented by regions constructed from minor civil divisions, such as the OMB-defined metropolitan and micropolitan New England City and Town Areas (NECTAs). [These NECTAs are recognized by the Bureau of Labor Statistics as economically integrated areas for labor force statistics, including area

Patterns of Commuting to the Yard Show the Portsmouth-South Portland-Biddeford, ME (County) MSA to be a Poor Fit



Page 3

unemployment rates.] BLS does not use county-based MSAs for its state-federal cooperative labor force statistics program in New England.

BRAC's Portsmouth Naval Shipyard "Economic Impact on Communities" uses a county-based region that accounts for only 57% of the Yard's workers.

The DOD used the Portland-South Portland-Biddeford ME (County) Metropolitan Statistical Area (Cumberland, Sagadahoc, and York Counties) as a measure of the communities affected by a potential closure of the Portsmouth Naval Shipyard. This area does not represent commuting patterns to the Portsmouth Naval Shipyard at all. The Portland-South Portland-Biddeford, ME (County) Metropolitan Area includes only counties in Maine. However, just under 57 percent of the Shipyard's civilian workers commuted from that area's three counties in 2004 -- and 95 percent of those were from York County. Less than 2 percent of the Shipyard's employees were from Cumberland and Sagadahoc (ME) Counties. Cumberland County commuters represented just 1.2 percent of the Yard's workforce and Sagadahoc County's civilian commuters were just 0.1 percent.

York County is, in truth, the only Maine county significantly impacted by the Yard's closure. Cumberland County is by far the largest of Maine counties in both population and jobs, containing Maine's largest city – Portland, and its population is 37 percent larger than that of York, Maine's second largest county. The use of the Portland-South Portland-Biddeford (County) MSA distorts and minimizes the true economic impact on communities in the Shipyard area.

❖ The Department of Defense's BRAC methodology ignored the direct and indirect effects on New Hampshire local economies.

> 39 percent of civilian workers at the Yard live in New Hampshire.

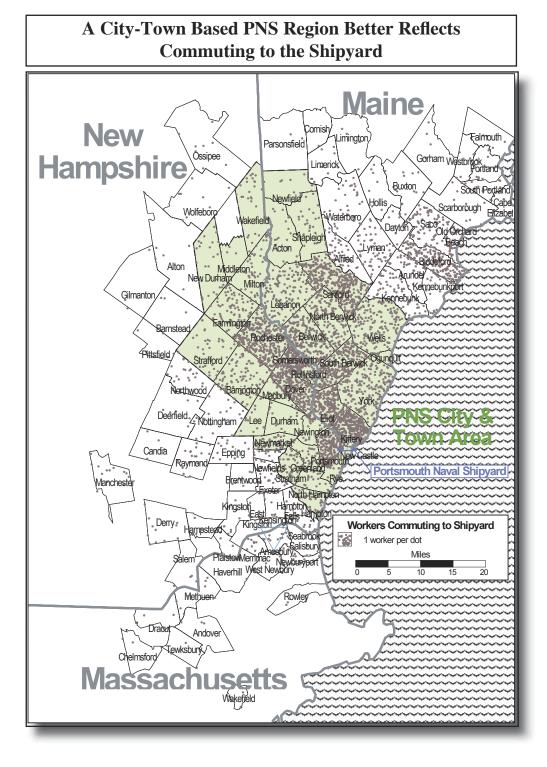
Thirty-nine percent of the Shipyard workers live in New Hampshire and, since people spend the bulk of their wages where they live, the direct loss of the Yard's wages will have a significant impact on the Granite State. The DOD analysis ignores this.

▶ More supply dollars are spent in New Hampshire than in Maine.

The business of the shipyard's commuting/economic region does not center on Portland/South Portland, Maine, as the DOD analysis would suggest, but on Portsmouth and Dover/Rochester, New Hampshire. So most of the secondary economic effects will fall on the New Hampshire side of the Piscataqua River. Data from the Shipyard's supply unit shows that nearly 60 percent more of its local purchasing dollars go to New Hampshire firms (\$3,552,392) than to Maine firms (\$2,264,930). [Much larger amounts are expended on purchases from Massachusetts and Connecticut firms specializing in the manufacture of submarine parts.]

➤ More services are contracted with New Hampshire businesses.

Because the New Hampshire share of the regional economy is larger, it is generally assumed that more services and construction are contracted to New Hampshire firms than to firms from Maine or any other single state. The DOD analysis ignores this.



Page 5

- ❖ A city and town-based region can account for 86% of the Yard's workers.
 - ➤ Of 5,123 PNS civilian workers in 2004; 4,412 lived in an area composed of cities and towns in this region.

A more meaningful way to represent the economic area impacted by the yard is to build a region based on the city/town areas from which workers commute to the Yard. [These areas are used in the Bureau of Labor Statistics Local Area Unemployment Statistics program to report labor force statistics.] An area made up of the Sanford, ME Micropolitan New England City and Town Area; the York, ME Small Labor Market Area; the Portsmouth, NH-ME Metropolitan New England City and Town Area, the Rochester-Dover, NH-ME Metropolitan New England City and Town Area; the Acton, ME Unattached Town; the Newfield, ME Unattached Town, and the Newmarket, NH Unattached Town encompasses 86.1 percent of the 2004 commuters to the Portsmouth Naval Shipyard.

Of the 5,123 civilian workers who were employed at the Yard at any time in 2004; 4,412 of them commuted from one of the cities or towns contained in this PNS commuting region.

- **❖** The number of direct and indirect jobs lost in a PNS closure equals 7.3% of covered jobs in the region.
 - > Yard jobs, alone, equate to 3.6%.

The Navy's original economic impact analysis² estimated 4,510 direct jobs to be lost. equivalent to 3.6 percent of the jobs in covered employment³ in the city and town-based PNS region. The total number of jobs lost in a closure of the Shipyard (9,199) equals 7.3 percent of the covered employment in the region⁴.

This is a much more significant and dramatic economic impact on communities than originally presented by DOD.

DOD Base Closure and Realignment, Report to the Commission, Department of the Navy Analyses and Recommendations, (Volume IV) ATTACHMENT J-5, Recommendation For Closure, Naval Shipyard, Portsmouth, Kittery, Maine.

³ Jobs in covered employment are jobs that are required by unemployment insurance law to be covered by unemployment insurance compensation.

⁴ The BRAC report shows the impact at 2.8 percent of BEA employment. A comparable impact number using the Portland-South Portland-Biddeford (County) MSA and covered jobs data would be 3.70 percent. Unlike BEA employment estimates, covered jobs data does not include jobs in self employment.

- **❖** If each worker losing a job because of the Yard's closure became unemployed the region's unemployment rate could more than double to 8.1%.
 - > Just the Shipyard's workers would raise the rate to 5.9%.

Unemployment rates are based on where the labor force resides. If the 4,510 jobs lost at the Shipyard were allocated to the city and town-based PNS region according to workers' commuting patterns to the Yard in 2004, then Yard workers who lived in the PNS region, alone, held 3,884 jobs. The region's 3,884 resident workers employed directly by the yard would raise the region's unemployment rate to 5.9 percent if they were added to the total of unemployed in 2004.

The Impact is Severe in All of the										
Labor Market Areas that Make up the PNS Region										
Area	Direct Employment Change	Indirect	Total Employment Change	Total Change as % of Residents Employed	Unemployment Rate 2004	2004 Unemployment Rate w/o Shipvard				
Maine	-2,596	-2,651	-5,248	-0.79%	4.6%	5.3%				
New Hampshire	-1,768	-1,805	-3,573	-0.51%	3.8%	4.3%				
PNS Region										
Rochester-Dover, NH-ME Metro. NECTA	-1,659	-1,695	-3,354	-4.41%	3.5%	7.8%				
Portsmouth, NH-ME Metro. NECTA	-864	-882	-1,746	-4.16%	3.5%	7.5%				
Newmarket, NH Unattached Town	-56	-58	-114	-2.12%	3.1%	5.2%				
Sanford, ME Micro. NECTA	-367	-375	-742	-6.98%	5.5%	12.1%				
York, ME Small Labor Market Area	-459	-468	-927	-5.54%	3.6%	8.9%				
Acton, ME Unattached Town	-20	-21	-41	-4.30%	5.7%	9.7%				
Newfield, ME Unattached Town	-7	-7	-14	-0.99%	3.9%	4.9%				
PNS Region Total	-3,884	-3,967	-7,851	-4.66%	3.7%	8.1%				

The Navy also estimated 9,166 total jobs would be lost by the Shipyard closing. By distributing these based on patterns of civilian commuting to the Yard, a total of 7,851 PNS region residents would become unemployed. They would have raised the region's 2004 unemployment rate from 3.7 percent to 8.1 percent if they were added to the total of unemployed in 2004.

❖ The Shipyard's closure could raise Maine's unemployment rate by 0.7 and New Hampshire's by 0.5.

If all those losing jobs as a result of a PNS closure were to become totally unemployed [4,510 directly; 4,656 indirectly; 9,166 total], the impact could raise the state of Maine's unemployment rate from 4.6 percent to 5.3 percent and New Hampshire's rate from 3.8 percent to 4.3 percent. York County, Maine could see its rate more than double from 3.9 percent to 8.4 percent.

- **❖** More than 4% of the employed residents in six Maine towns will lose jobs with a PNS closure.
- ❖ 3.0% of employed residents in Rollinsford and 2.5% in both Somersworth, and Farmington, New Hampshire would be out of work.

Looking at individual towns, 6.18 percent of the South Berwick, Maine residents, who are employed, work at the Shipyard. Likewise for the following York County Maine towns: Kittery, Eliot, Berwick, North Berwick, Lebanon, and Sanford have shipyard commuters representing 5.53, 5.51, 5.32, 4.68, 4.01, and 3.67 percent of their employed residents, respectively. Of working York County residents, 2.32 percent are employed at the Yard. In New Hampshire, 2.99 percent of Rollinsford's employed residents work at the yard as do 2.51 percent of the employed residents of Somersworth and 2.46 percent of the employed residents of Farmington.

In conclusion, unlike the Department of Defense, we are prepared to make a judgement about the potential economic impact of a closure of the Portsmouth Naval Shipyard. Any economic shock that has the ability to simultaneously raise the unemployment rate of the State of Maine by 0.7 percent and raise the unemployment rate of the State of New Hampshire by 0.5 percent has to be considered a major setback. We can think of no business closure in Northern New England, in recent memory, that involved the direct loss of so many jobs. To the twelve cities and towns in Maine and New Hampshire where the direct and indirect effects of the closure means job loss for from five to more than eleven percent, of their employed residents, the economic consequence of the Yard's closure would be not much short of an economic disaster.